

motor control circuit comprising, a pair of unipolar control circuits wherein at least one of the unipolar control circuits is connected between a respective current source and a current input to the motor wherein at least one of the unipolar control circuits is adapted to operate the motor in one of the two directions,

a motor control circuit wherein each of the unipolar control circuits are substantially identical,

A' a motor control circuit wherein at least one of the unipolar control circuits further comprises,

a solid state switch located between the motor current input and the source of direct current wherein the degree to which the solid state switch allows current to flow to the motor is controlled by an input bias signal to the switch,

a current limiting member for adjusting said input bias signal according to the current flowing through the motor, such that the solid state switch adjusts the input bias to the solid state switch such that less current flows through the motor when a predetermined period of current limiting has occurred, and

a motor control circuit wherein the current limiting member further comprises a temperature compensation circuit.

On Page 4, the last full paragraph has been rewritten as follows:

A2 In the example of an outside rear view mirror housing which is foldable relative to the vehicle body between a folded position and a lateral position, a single electric motor can be connected to a mechanical member for translating the rotational motion of the motor's shaft into a movement of the mirror housing between the described positions.

On Page 5, the fifth full paragraph has been rewritten as follows:

A3 However, this is but one preferred characteristic of the motor control arrangement for determining when to switch off or substantially reduce power to the motor.

On Page 7, the fourth full paragraph has been rewritten as follows:

A4 Current flows through the diode of Q4 (a parasitic diode which is available in transistors of this general type), through the motor RM, through Q1 and through current

A4
sense resistors R8 and R9. This diode provides reverse current blocking and over voltage protection but in other circuit configurations, a Zener diode of suitable characteristics could be across the output devices. In the preferred embodiment solid state switches Q1 and Q4 are each a Metal Oxide Silicon Field Effect Transistor (MOSFET) semi-conductor transistor device.

On Pages 8-9, the paragraph spanning the bottom of page 8 to the top of page 9 has been rewritten as follows:

A5
The increase in current through the thermistor R2 with increasing temperature will cause an increased voltage across R7. This voltage reduces the voltage appearing across the base emitter junction of Q3. The effect is to off-set the reduction in base emitter voltage required by Q3 with increased temperature. R7, R2 and R1 are chosen to give a best fit current versus temperature curve. R1 limits the maximum current that can flow when very high temperatures are experienced by the system. It is worth noting that temperature compensation can be used to produce other than flat responses to accommodate for material softening in the mechanics.

On Page 11, the first line has been rewritten as follows:

A6
What is claimed is:

After the claims, the following text has been inserted:

Abstract

A7
A motor control circuit for a direct current electric motor has a pair of direct current inputs supplied respectively from negative and positive current sources. The direction of travel of the rotor of the motor is determined by the polarity of the current supplied to it. A new motor control circuit includes a pair of substantially identical unipolar control circuits. Each of the unipolar control circuits being connected between a respective current source and a current input to the motor wherein a respective unipolar control circuit is adapted to operate the motor in one of the two directions.